

Appl. No. 09/683,364
Amtd. dated June 06, 2005
Reply to Office action of March 08, 2005

REMARKS/ARGUMENTS

1. Claims 20, 21, and 23-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over the applicant's prior art figure (APAF) in view of Yamazaki et al. (US 6,677,613 B1).

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Response:

First, claim 20 and claim 29 are amended based on the disclosure of the present application, and specifically, based on Fig. 8 and Fig. 14. No new matter is included.

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Second, the applicant intends to point out the difference between the amended claims 20 and 29 of the present application and applicant's prior art figure (APAF) in view of Yamazaki et al.'s disclosure. As disclosed in the amended claim 20 and claim 29 of the present application, there are two obvious differences between applicant's prior art figure (APAF) in view of Yamazaki et al.'s disclosure and the present application. According to the amended claims 20 and 29, this present application just uses one pixel cap bottom plate (numeral 112/242 shown in Figs.8 or 14), and the pixel cap bottom plate covers all transistors in the pixel cell including the gates, the sources, the drains, and the contact plug of each transistor. Furthermore, the pixel cap top plates and the pixel cap bottom plate of this present application are all positioned above and cover the transistor block or the transistors.

According to applicant's prior art disclosure as shown in Figs.1-7, the prior art uses two pixel cap bottom plates 22, 42 and four pixel cap top plates 54, 20 positioned at two sides of the transistor block 18, without covering or positioning above the transistors 16 (or transistor gate 52) at all. Referring to the disclosure of Yamazaki et al., it shows each pixel cell only has a transistor 143, so the pixel cap bottom plate 135

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of Yamazaki et al. only covers a transistor 143 in the single pixel cell and that is absolutely different from this present application for that the **pixel cap bottom plate 112 covers all of the several transistors 106 of the single pixel cell shown in Fig.8.**

5 In addition, this present application discloses that **the pixel cap top plate 228 is electrically connected to the sources 215/216 and located under the pixel cap bottom plate 236**. However, Yamazaki et al. discloses that the storage capacitance 144 is formed with the light shielding film 135 as one electrode and the pixel electrode 139, which is electrically connected to drain 146. Therefore, **the pixel electrode 139 is as the pixel cap top plate of the storage capacitance 144, and the light shielding film 135 is as the pixel cap bottom plate of the storage capacitance 144**, wherein **the pixel electrode (pixel cap top plate) 139 is located above the light shielding film (pixel cap bottom plate) 135** (col. 6, lines 43-52, and Figs.1A-3). Therefore, the structure and relative location of the pixel cap bottom plate and pixel cap top plate of Yamazaki's are different
10 from that of the present application. On the other hand, applicant's prior art discloses the storage capacitance is installed at two sides of the transistors and **the pixel cap top plate 54 electrically connected to the source is located on the pixel cap bottom plate 42**. Thus, the combination of Yamazaki et al. and applicant's prior art cannot obtain the structure of this present application.
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20 From the above discussion, **neither the applicant's prior art figure nor Yamazaki et al.'s disclosure teach positioning the pixel cap bottom plate above the pixel cap top plate and covering all transistors, which are described in the amended claim 20 and claim 29 of the present application**. Therefore, the Applicants believe that one of ordinary skill cannot combine the applicant's prior art figure with Yamazaki et al.'s disclosure to accomplish the present application. Reconsideration of the amended claim 25 20 and claim 29 is hereby requested.

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As claims 21, 23-26, and 28 are dependent upon the amended claim 20, they should be allowed if the amended claim 20 is allowed. Reconsideration of the rejection of claims 21, 23-26, and 28 is therefore requested. Claims 30-37 are dependent upon the amended claim 29, and they should be allowed if the amended claim 29 is allowed.

5 Reconsideration of the rejection of claims 30-37 is therefore requested.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

10 Respectfully submitted,



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20 is 12 hours behind the Taiwan time, i.e. 9 AM in D.C. = 9 PM in Taiwan.